## **Proposed Cleanup Plan**

# MCB Camp Lejeune



Operable Unit No. 1

## SUMMARY

This fact sheet outlines the Department of the Navy's (DON) Proposed Cleanup Plan for Site 21 (Transformer Storage Lot 140), Site 24 (Industrial Fly Ash Dump), and Site 78 (Hadnot Point Industrial Area) at Marine Corps Base (MCB), Camp Lejeune, North Carolina. These three sites are grouped together as "Operable Unit" (OU) No. 1. Based on the results of environmental studies, cleanup actions are warranted to treat contaminated groundwater and remov soil at various locations within OU No. 1. Groundwater and soil were contaminated by apparent former waste disposal activities.

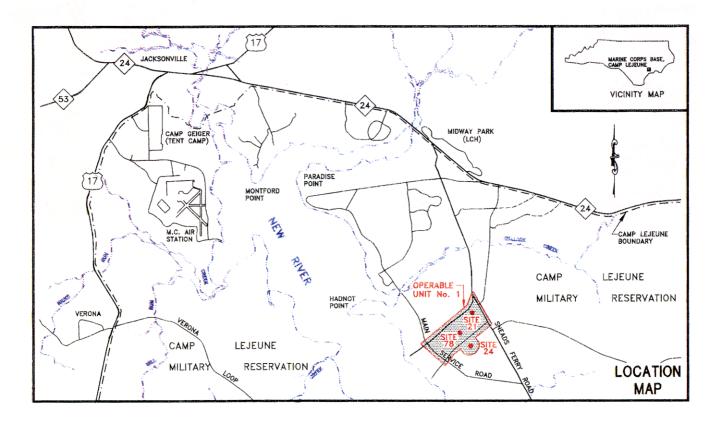
### Public Participation

The DON encourages public participation in their environmental program. In the past, public meetings have been held to provide the community with information about the continuing environmental studies and to receive their ideas and comments. This Proposed Cleanup Plan for OU No. 1 is available for public review and comment. Page 8 lists the location where the reports are located and the contact persons for additional information. Additionally, page 5 provides information regarding the upcoming public meeting.

## Environmental Studies

The investigation at Sites 21, 24, and 78 (referred to as a "remedial investigation" or "RI") is being conducted through the DON's Installation Restoration Program (IRP). The goal of this program is to study former waste disposal areas at all Navy and Marine Corps Installations and to remediate them ("clean them up") as necessary. The IRP process is outlined on page 8. Definitions are provided on page 7, and the acronyms or abbreviations used in this fact sheet are listed below.

#### AOC Area of Concern **DEHNR** Department of Environment, Health, and Natural Resources DON Department of the Navy **EPA Environmental Protection Agency** Federal Facilities Agreement **FFA** IRD Installation Restoration Program **MCB** Marine Corps Base **NPL** National Priorities List OU Operable Unit Polychlorinated Biphenyl **PCB** Remedial Action Alternative RAA RI Remedial Investigation **TSDF** Treatment, Storage, Disposal **Facility** Volatile Organic Compound VOC



The investigations performed at MCB, Camp Lejeune were conducted in accordance with a Federal Facilities Agreement (FFA) between the DON, the United States Environmental Protection Agency (EPA) Region IV, and the North Carolina Department of the Environment, Health, and Natural Resources (DEHNR). The FFA was signed by these parties following the inclusion of MCB, Camp Lejeune to the National Priorities List (NPL). The FFA outlines a schedule to study and remediate the sites. The NPL is a list of contaminated sites in the United States targeted for accelerated study and clean up due to potential impacts to the public health and environment. Several of the Base's former disposal areas (such as Sites 21, 24, and 78) prompted the entire Base to be nominated and placed on the NPL.

Several environmental studies have been conducted at OU No. 1 beginning in 1983. Most of the studies have focused on Site 78, the Hadnot Point Industrial Area. One of these studies resulted in a plan for cleaning up the contaminated shallow groundwater at Site 78. This cleanup has been initiated.

## OPERABLE UNIT No. 1 PROFILE

OU No. 1 covers an area of approximately 690 acres (see figure above). It is bordered by Holcomb Boulevard, Sneads Ferry Road, Duncan Street and the Main Service Road. Cogdels Creek and Beaver Dam Creek are the nearby surface water bodies. A description of each site is provided below:

Site 21 (Transformer Storage Lot 140) is located entirely within Site 78. Site 21 has had a history of pesticide storage and handling. In addition, transformer oil was reportedly disposed at this site. The southern portion of the site was used as a pesticide mixing area and as a cleaning area for pesticide application equipment from 1958 to 1977. In the northeastern portion of the site, a pit was reportedly used as a disposal area for transformer oil containing polychlorinated biphenyls (PCBs) during a one year period between 1950 and 1951. PCBs were a main component in dielectric fluids. Because PCBs may cause cancer, their manufacture has been discontinued in the United States.

Aquifer: A formation of rock or sand and gravel beneath the ground surface. It accumulates water within cracks and spaces between grains. When water accumulates in sufficient quantities, the aquifer can be tapped by wells and the water may be used as a drinking water source.

**Area of Concern:** An area where potential hazardous substances may have been handled and/or disposed.

Groundwater: Rain or other precipitation that fills an aquifer (see definition above).

In Situ: "In place" remediation or treatment as opposed to excavation or removal prior to treatment.

Metal Compound: An element which is absent of carbon (e.g., lead) and is naturally occurring in the environment.

Operable Unit: A grouping of sites based on similar potential remedial solutions, geographic location, or other factors.

Organic Compound: Compounds which consist mainly of carbon, hydrogen, oxygen, and nitrogen.

Polychlorinated biphenyls (PCBs): A family of organic compounds used since 1926 in electric transformers as insulators and coolants, in lubricants, carbonless copy paper, adhesive, and caulking compounds. EPA banned the use of PCBs in 1976. PCBs are stored in the fatty tissues of humans and animals through the bioaccumulation process.

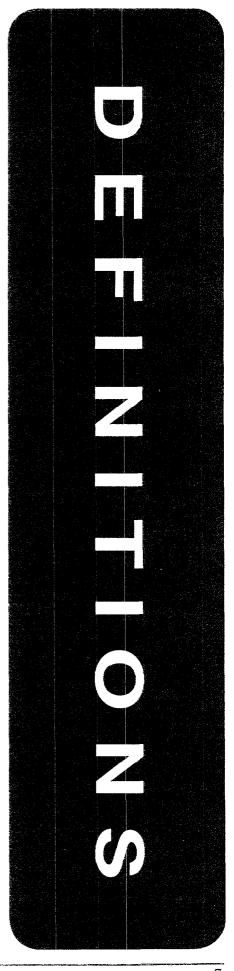
Plume: A delineated area of groundwater contamination.

Potable: Water which is suitable for drinking or other purposes.

**Remediate:** To treat or remove waste for purposes of restoring an area for future use.

Volatiles Organic Compounds (VOCs): A group of organic compounds characterized by their greater tendency to change into a gaseous state (e.g., vinyl chloride, trichloroethene).

Water Table: Level at which groundwater is encountered in the subsurface.



Preliminary Assessment/Site Inspection (PA/SI): identifies potential threats to human health and the environment

Remedial Investigation (RI):

analyzes contaminants and determines possible contamination migration from site and risks to human health and the environment

Feasibility Study (FS):

evaluates feasible cleanup methods to achieve environmental standards for human health and the environment

Proposed Remedial Action Plan (PRAP): outlines feasible alternatives and recommends remediation or cleanup method

Public Comment Period/Meeting: allows for public examination of the PRAP and

expression of comments to appropriate agency; meeting held to present plan and answer questions

Record of Decision (ROD):

specifies the cleanup method after evaluating public comments

Remedial Design (RD):

involves preparation of construction specifications and other design plans for remediation

Remedial Action (RA):

encompasses the actual remediation or cleanup of the site to approved environmental standards

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## CONTACTS FOR MORE INFORMATION

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